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NEWS	5	AUG		CA/CAplus enhanced with legal status information for U.S. patents
NEWS	6	SEP	09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	7	SEP	11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT	21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS	9	OCT	21	Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS	1 ()	NOV	23	Addition of SCAN format to selected STN databases
NEWS		NOV		Annual Reload of IFI Databases
NEWS		DEC		FRFULL Content and Search Enhancements
NEWS		DEC		DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS	14	DEC	02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS	15	DEC	02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS	16	DEC	02	USGENE: Enhanced coverage of bibliographic and sequence information
NEWS	17	DEC	21	New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAplus
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=> s calcitonin gene related peptide or CGRP L1 31928 CALCITONIN GENE RELATED PEPTIDE OR CGRP

=> s pituitary adenylate cyclase activating peptide or PACAP
L2 9041 PITUITARY ADENYLATE CYCLASE ACTIVATING PEPTIDE OR PACAP

=> s l1 or l2 L3 40576 L1 OR L2

=> dup rem 14
PROCESSING COMPLETED FOR L4
L5 27 DUP REM L4 (16 DUPLICATES REMOVED)

=> d bib abs 1-YOU HAVE REQUESTED DATA FROM 27 ANSWERS - CONTINUE? Y/(N):v ANSWER 1 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson L5Corporation on STN DUPLICATE 1 ΑN 2009:24949 BIOSIS PREV200900024949 DN Functional and Immunohistochemical Characterization of CB1 and ΤI CB2 Receptors in Rat Bladder. ΑU Hayn, Matthew H. [Reprint Author]; Ballesteros, Inmaculada; de Miguel, Fernando; Coyle, Christian H.; Tyagi, Shachi; Yoshimura, Naoki; Chancellor, Michael B.; Tyagi, Pradeep Univ Pittsburgh, Med Ctr, Dept Urol, Kaufmann Bldg, Suite 700,3451 5th Ave, Pittsburgh, PA 15213 USA haynm2@upmc.edu SO Urology, (NOV 2008) Vol. 72, No. 5, pp. 1174-1178. ISSN: 0090-4295. Article DT LA English Entered STN: 17 Dec 2008 ED Last Updated on STN: 17 Dec 2008 OBJECTIVES To determined the localization of CB1 and CB2 AB receptors in rat bladder and investigate the effect of a mixed CB1/CB2 receptor agonist, ajulemic acid (AJA), on chemically evoked release of the sensory neuropeptide calcitonin gene-retated peptide (CGRP).METHODS Whole rat bladders were incubated in a series of tissue baths containing physiologic salt solution to measure baseline CGRP release by enzyme immunoassay. Capsaicin (30 nM) and adenosine triphosphate (10 mu M) were used to provoke CGRP release in the presence or absence of AJA. Specificity of AJA for CB1 and CB2 receptors was determined using antagonists. Localization was determined by immunofluorescence for CB1 and CB2 receptors in fixed bladders.RESULTS Immunofluorescence, showed the localization of CB1 and CB2 receptors in the bladder. baseline CGRP release was 605 + /- 62 pg/g of bladder weight, and AJA had no effect on CGRP release. The addition of adenosine triphosphate/capsaicin significantly increased the CGRP release over baseline, by 44% (P < .05), and AJA application

significantly

decreased CGRP release, by 29% compared with controls (P < .05). The CB1 and CB2 antagonists AM 251 and AM 630, respectively, reversed the

blunting effect of AJA on evoked CGRP release, resulting in an increase of 40% and 38% over baseline, respectively.CONCLUSIONS CB1 and

CB2 receptors are localized in the urothelium of rat bladder, and application of AJA inhibits the evoked release of CGRP by acting on CB1 and CB2 receptors. These findings identify a potential new pathway

for study in the evaluation and treatment of painful bladder syndrome/

interstitial cystitis. UROLOGY 72: 1174-1178, 2008. (C) 2008 Elsevier Inc.

L5 ANSWER 2 OF 27 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights

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AN 2008366272 EMBASE

TI Reply.

AU Liu, Hsin-Tzu, Dr. (correspondence); Kuo, Hann-Chorng

CS Department of Urology, Buddhist Tzu Chi General Hospital, Tzu Chi University, Hualien, Taiwan, Province of China.

SO Urology, (August 2008) Vol. 72, No. 2, pp. 464. Refs: 5

ISSN: 0090-4295; E-ISSN: 1527-9995 CODEN: URGYAZ

PB Elsevier Inc., 360 Park Avenue South, New York, NY 10010, United States.

PUI S 0090-4295(08)00228-8

CY United States

DT Journal; Letter

FS 028 Urology and Nephrology

030 Clinical and Experimental Pharmacology

037 Drug Literature Index

LA English

ED Entered STN: 4 Sep 2008

Last Updated on STN: 4 Sep 2008

L5 ANSWER 3 OF 27 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights

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AN 2008366271 EMBASE

TI Intravesical Botulinum Toxin A Injections Plus Hydrodistension Can Reduce

Nerve Growth Factor Production and Control Bladder Pain in Interstitial Cystitis: A Molecular Mechanism.

AU Namazi, Hamid, Dr. (correspondence)

CS Department of Orthopaedic Surgery, Shiraz University of Medical Sciences,

Chamran Hospital, Shiraz, Iran, Islamic Republic of.

SO Urology, (August 2008) Vol. 72, No. 2, pp. 463-464. Refs: 6

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ISSN: 0090-4295; E-ISSN: 1527-9995 CODEN: URGYAZ
     Elsevier Inc., 360 Park Avenue South, New York, NY 10010, United
PΒ
States.
PUI
    S 0090-4295(08)00227-6
     United States
CY
     Journal; Letter
DТ
             Urology and Nephrology
FS
     028
             Clinical and Experimental Pharmacology
     030
     037
             Drug Literature Index
LA
     English
     Entered STN: 4 Sep 2008
ED
     Last Updated on STN: 4 Sep 2008
     ANSWER 4 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson
L_5
Corporation on STN
     DUPLICATE 2
ΑN
     2008:134998 BIOSIS
     PREV200800124454
DN
    Botulinum toxin type A inhibits sensory neuropeptide release in
ΤI
rat
    bladder models of acute injury and chronic inflammation.
     Lucioni, Alvaro [Reprint Author]; Bales, Gregory T.; Lotan,
ΑU
Tamara L.;
    McGehee, Daniel S.; Cook, Sean P.; Rapp, David E.
     Univ Chicago, Pritzker Sch Med, Dept Surg, Urol Sect,
5841S, Maryland
     Ave, MC 6038, Chicago, IL 60637 USA
     alvarolucioni@hotmail.com
     BJU International, (FEB 2008) Vol. 101, No. 3, pp. 366-370.
SO
     ISSN: 1464-4096.
DT
    Article
    English
LA
ED
     Entered STN: 20 Feb 2008
     Last Updated on STN: 20 Feb 2008
AB
     To determine the effect of botulinum toxin type A (BTX-A) on the
release
     of the neuropeptides substance P (SP) and calcitonin
     gene-related peptide (CGRP) from
     isolated bladder preparations after acute injury with HCl and the
     induction of cyclophosphamide (CYP)-induced cystitis, as
neurogenic
     inflammation has been increasingly identified in urological
disorders such
     as interstitial cystitis. Adult rats had either an
     intraperitoneal injection with CYP or saline over a 10-day
period to
     induce chronic bladder inflammation, after which the bladder was
     harvested, or normal bladder explants were injured acutely with
incubation
     (20 \text{ s}) in HCl (0.4 \text{ M}). To measure the effect of BTX-A on the
     neurotransmitters, harvested bladders were incubated in an organ
```

bath

containing BTX-A (10 U) or vehicle. Bladders were transferred to a

subsequent bath (physiological saline) and incubated for 15 min, and the

bathing medium analysed to measure neurotransmitter release, as $\det \operatorname{ermined}$

by radioimmunoassay. Bladder specimens from sham treatment, controls and

experimental rats were compared histologically. Acute injury with HCl

caused a significantly greater release of both CGRP and SP release (1235 and 1655 pg/g, respectively) than in controls (183 and 449

pg/g, respectively; P < 0.001). This increase in neurotransmitter release

was partly inhibited by exposure to BTX-A (870 and 1033 pg/g (P $< 0.05 \ \mathrm{and}$

< 0.01). CYP-induced chronic inflammation caused significantly greater

release of SP than in the controls (1060 and 605 pg/g, respectively; P <

0.005). Exposure to BTX-A partly inhibited the release of SP after $\,$

CYP-induced cystitis (709 pg/g, P < 0.05). The application of BTX-A

inhibits the release of sensory neurotransmitters from isolated bladder

preparations in rat bladder models of both acute injury and chronic

inflammation, suggesting a potential clinical benefit of $\ensuremath{\mathsf{BTX-A}}$ in the

treatment of neurogenic inflammation.

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AN 2008555557 EMBASE

TI Inside information: The unique features of visceral sensation.

AU Robinson, David R.; Gebhart, G.F.

CS Department of Anesthesiology, Pittsburgh Center for Pain Research,

University of Pittsburgh, Pittsburgh, PA 15213, United States.

AU Robinson, D. R., Dr. (correspondence)

CS Department of Anesthesiology, Pittsburgh Center for Pain Research,

University of Pittsburgh, Pittsburgh, PA 15213, United States.

SO Molecular Interventions, (1 Oct 2008) Vol. 8, No. 5, pp. 242-253.

Refs: 76

ISSN: 1534-0384; E-ISSN: 1543-2548 CODEN: MIONAR

PB American Society for Pharmacology and Experimental Therapy, 9650 Rockville

Pike, Bethesda, MD 20814, United States. CY United States DT Journal; General Review; (Review) FS 002 Physiology 008 Neurology and Neurosurgery 048 Gastroenterology LA English SLEnglish Entered STN: 19 Dec 2008 ΕD Last Updated on STN: 19 Dec 2008 Most of what is written and believed about pain and nociceptors AB originates from studies of the "somatic" (non-visceral) sensory system. As a result, the unique features of visceral pain are often overlooked. In the clinic, the management of visceral pain is typically poor, and drugs that are used with some efficacy to treat somatic pain often present unwanted effects on the viscera. For these reasons, a better understanding of visceral sensory neurons - particularly visceral nociceptors - is required. This review provides evidence of functional, morphological, and biochemical differences between visceral and non-visceral afferents, with a potential nociceptive roles, and also considers some of the potential mechanisms of visceral mechanosensation. ANSWER 6 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN ΑN 2008:74342 BIOSIS PREV200800073712 DN Repeated botulinum toxin injections: A new answer for further ΤI questions. Lazzeri, Massimo [Reprint Author] ΑU CS Dept Urol, Santa Chiara Firenze Giomi Grp, Pzza INdipendenza 11, I - 50129Florence, Italy lazzeri.m@tiscali.it SO European Urology, (DEC 2007) Vol. 52, No. 6, pp. 1571-1573. CODEN: EUURAV. ISSN: 0302-2838. Article DT Editorial English LAEDEntered STN: 16 Jan 2008 Last Updated on STN: 16 Jan 2008

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AN 2007494550 EMBASE

TI Resiniferatoxin and botulinum toxin type A for treatment of lower urinary

tract symptoms.

AU Cruz, Francisco, Dr. (correspondence); Dinis, Paulo

CS Department of Urology, Hospital de S. Joao, Faculty of Medicine/IBMC of

Porto, Porto, Portugal. cruzfjmr@med.up.pt

AU Cruz, Francisco, Dr. (correspondence)

CS Department of Urology, Hospital de S. Joao, P-4200 Porto, Portugal.

cruzfjmr@med.up.pt

SO Neurourology and Urodynamics, (2007) Vol. 26, No. 6 SUPPL., pp. 920-927.

Refs: 57

ISSN: 0733-2467; E-ISSN: 1520-6777 CODEN: NEUREM

CY United States

DT Journal; Conference Article; (Conference paper)

FS 028 Urology and Nephrology

037 Drug Literature Index

006 Internal Medicine

008 Neurology and Neurosurgery

LA English

SL English

ED Entered STN: 23 Oct 2007

Last Updated on STN: 23 Oct 2007

AB Resiniferatoxin (RTX) and botulinum toxin subtype A (BTX-A) are increasingly viewed as potential treatments for lower urinary tract

symptoms (LUTS) refractory to conventional therapy. RTX, a capsaicin

analogue devoid of severe pungent properties, acts by desensitizing the

transient receptor potential vanilloid type 1 (TRPV1) receptor and $\ensuremath{\mathsf{T}}$

inactivating C-fibers. $\operatorname{BTX-A}$ cleaves soluble $\operatorname{N-ethylmaleimide-sensitive}$

factor attachment protein receptor (SNARE) proteins in afferent and

efferent nerve endings, therefore impeding the fusion of synaptic vesicles

with the neuronal membrane necessary for the release of neurotransmitters.

In patients with neurogenic and idiopathic detrusor overactivity, RTX and

BTX-A have been shown to increase the volume to first detrusor contraction, increase bladder capacity, and improve urinary incontinence

and quality of life. Recent data also suggest a role for these neurotoxins in treating urgency, the primary symptom in overactive bladder

(OAB) syndrome. Furthermore, experimental data strongly support the use

of both neurotoxins in the treatment of pain and frequency in patients

with interstitial cystitis/painful bladder syndrome

are still inconclusive. In spite of promising results overall, it should

be made clear that the administration of these neurotoxins is still

considered an experimental procedure and that more clinical studies are

necessary before a license for their use will be issued by health authorities. .COPYRGT. 2007 Wiley-Liss, Inc.

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AN 2007245559 EMBASE

TI New insights into the pathogenesis of fibromyalgia syndrome: Important

role of peripheral and central pain mechanisms.

AU Staud, Roland (correspondence)

CS Division of Rheumatology and Clinical Immunology, McKnight Brain Institute, University of Florida, Gainesville, FL 32610-0221, United

States. staudr@ufl.edu

AU Staud, Roland (correspondence)

CS Department of Medicine, University of Florida, College of Medicine,

Gainesville, FL 32610-0221, United States. staudr@ufl.edu

SO Current Rheumatology Reviews, (May 2007) Vol. 3, No. 2, pp. 113-121.

Refs: 143

ISSN: 1573-3971

CY Netherlands

DT Journal; General Review; (Review)

FS 026 Immunology, Serology and Transplantation

003 Endocrinology

031 Arthritis and Rheumatism

OO5 General Pathology and Pathological Anatomy

008 Neurology and Neurosurgery

LA English

SL English

ED Entered STN: 26 Jun 2007

Last Updated on STN: 26 Jun 2007

AB Clinical symptoms of chronic muscle conditions like fibromyalgia (FM),

include pain, stiffness, subjective weakness, and muscle fatigue. Pain in

 $\,$ FM is usually described as fluctuating and always associated with local or

generalized tenderness (hyperalgesia and/or allodynia). This tenderness

related to FM pain depends on increased peripheral and/or central nervous

system responsiveness to peripheral stimuli which can be either noxious

(hyperalgesia) or non-noxious (allodynia). For example, patients with

muscle hyperalgesia will rate painful muscle stimuli higher than normal

controls, whereas patients with allodynia may perceive light touch as

painful, something that a "normal" individual will never describe as

painful. The pathogenesis of such peripheral and/ or central nervous

system changes in FM is unclear, but peripheral tissue changes, specifically in muscles have been implicated. Indirect evidence from

interventions that attenuate tonic peripheral impulse input in patients

with FM suggest that overall FM pain is dependent on signals from deep

tissues. More importantly, allodynia and hyperalgesia can be improved or

abolished by removal of peripheral impulse input. Another potential

mechanism for FM pain is central disinhibition. However, this pain

 $\label{lem:mechanism} \mbox{ mechanism also depends on tonic impulse input even if only } \mbox{ inadequately}$

inhibited. Thus a promising approach to understanding FM pain is to

determine whether abnormal activity of receptors in deep tissues is

fundamental to the development and maintenance of this chronic pain

disorder. . COPYRGT. 2007 Bentham Science Publishers Ltd.

L5 ANSWER 9 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN $\,$

AN 2007:22168 BIOSIS

DN PREV200700036860

TI PACAP enhances mouse urinary bladder contractility and is upregulated in micturition reflex pathways after cystitis.

AU Herrera, Gerald M.; Braas, Karen M.; May, Victor; Vizzard, Margaret A.

[Reprint Author]

CS Univ Vermont, Coll Med, Dept Neurol, D411 Given Bldg, Burlington, VT 05405

USA

margaret.vizzard@uvm.edu

SO Vaudry, H [Editor]; Laburthe, M [Editor]. Ann. N. Y. Acad. Sci., (2006)

pp. 330-336. Annals of the New York Academy of Sciences.
Publisher: BLACKWELL PUBLISHING, 9600 GARSINGTON RD, OXFORD OX4

2DQ, OXEN,

UK. Series: ANNALS OF THE NEW YORK ACADEMY OF SCIENCES.
Meeting Info.: 7th International Symposium on VIP, PACAP and

lated
Peptides. Rouen, FRANCE. September 11 -14, 2005. Conseil Reg

Peptides. Rouen, FRANCE. September 11 -14, 2005. Conseil Reg Haute-Normandie; Agglomerat Rouen; Inst Fed Rech Multidisciplinaires

Peptides; Inst Natl Sante Rech Med; Municipal Rouen; Sci Act Haute-Normandie; Tech Chime-Biol Sante; Univ Paris 7; Univ Rouen.

CODEN: ANYAA9. ISSN: 0077-8923. ISBN: 1-57331-550-8(H).

DT Book; (Book Chapter) Conference; (Meeting)

LA English

ED Entered STN: 27 Dec 2006 Last Updated on STN: 11 Jul 2007

AB Pituitary adenylate cyclase-activating polypeptide (PACAP) elicits a transient contraction, sustained increase in the amplitude of

spontaneous phasic contractions, and significantly increases the amplitude $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right) +$

of nerve-mediated contractions in mouse urinary bladder smooth $\ensuremath{\mathsf{muscle}}$

(UBSM) strips. PACAP immunoreactivity (IR) is increased in micturition reflex pathways following cystitis. PACAP may contribute to altered sensation and bladder overactivity in the chronic

DUPLICATE 3

bladder inflammatory syndrome, interstitial cystitis.

L5 ANSWER 10 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN 2006:290216 BIOSIS

DN PREV200600295152

TI Botulinum toxin type A inhibits calcitonin generelated peptide release from isolated rat bladder.

AU Rapp, David E. [Reprint Author]; Turk, Katherine W.; Bales, Gregory T.;

Cook, Sean P.

CS Univ Chicago, Pritzker Sch Med, Dept Surg, Urol Sect, 5841 S Maryland

Ave, MC 6038, Chicago, IL 60637 USA derapp@yahoo.com

SO Journal of Urology, (MAR 2006) Vol. 175, No. 3, Part 1, pp. 1138-1142.

CODEN: JOURAA. ISSN: 0022-5347.

DT Article

AN

LA English

ED Entered STN: 31 May 2006

Last Updated on STN: 31 May 2006

AB Purpose: Increasing evidence suggests that sensory nerve dysfunction may

underlie several urological disorders, including interstitial cystitis and sensory urgency. We determined the effect of botulinum toxin type A (Allergan, Irvine, California) on baseline and

chemically evoked release of the sensory neuropeptide, calcitonin gene-related peptide in an isolated bladder

preparation.Materials and Methods: Whole rat bladders were incubated in a

series of tissue baths containing physiological salt solution. Following

bladder equilibration in PSS sequential incubation was performed and this

sample was used to measure baseline CGRP release. To evoke CGRP release tissue was subsequently incubated in PSS containing capsaicin (30 nM) and adenosine triphosphate (10 mu M). To measure the

effect of BTX-A on baseline and evoked CGRP release bladders were incubated for 6 hours in an organ bath containing BTX-A (50 mu M) or

vehicle prior to bladder equilibration. CGRP release was determined by radioimmunoassay. Results: Mean baseline release of CGRP SEM was 346 44 pg/gm. Adenosine triphosphate/capsaicin application increased CGRP release by 75% over baseline (606 +/- 98 pg/gm, p < 0.005). BTX-A application resulted in a 19% decrease in

baseline release of CGRP, although this difference did not achieve statistical significance. BTX-A application significantly

decreased evoked CGRP by 62% vs control (606 +/- 98 vs 229 +/- 21 pg/gm, p < 0.005). Conclusions: BTX-A application inhibits the evoked

release of CGRP from afferent nerve terminals in isolated rat bladder. This finding suggests a potential clinical benefit of BTX-A for

the treatment of interstitial cystitis or sensory urgency.

L5 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 4

AN 2006:983267 CAPLUS

DN 145:500253

TI PACAP enhances mouse urinary bladder contractility and is upregulated in micturition reflex pathways after cystitis

AU Herrera, Gerald M.; Braas, Karen M.; May, Victor; Vizzard, Margaret A.

CS Department of Pharmacology, University of Vermont College of Medicine,

Burlington, VT, 05405, USA

SO Annals of the New York Academy of Sciences (2006), 1070(VIP, PACAP, and

Related Peptides), 330-336

CODEN: ANYAA9; ISSN: 0077-8923

PB Blackwell Publishing, Inc.

DT Journal

LA English

AB Pituitary adenylate cyclase-activating polypeptide (PACAP) elicits a transient contraction, sustained increase in the amplitude of

spontaneous phasic contractions, and significantly increases the amplitude

of nerve-mediated contractions in mouse urinary bladder smooth muscle

(UBSM) strips. PACAP immunoreactivity (IR) is increased in micturition reflex pathways following cystitis. PACAP may contribute to altered sensation and bladder overactivity in the chronic

bladder inflammatory syndrome, interstitial cystitis.

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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AN 2006:221849 BIOSIS

DN PREV200600225257

 ${\tt TI}$ Role for pituitary adenylate cyclase activating polypeptide (${\tt PACAP}$

) in cystitis-induced plasticity of micturition reflexes.

AU Braas, K. M. [Reprint Author]; May, V.; Zvara, P.; Nausch, B.; Kliment,

J.; Dunleavy, J. D.; Nelson, M.; Vizzard, M. A.

CS Univ Vermont, Coll Med, Dept Anat and Neurobiol, Burlington, VT 05405 USA

SO Regulatory Peptides, (SEP 15 2005) Vol. 130, No. 3, pp. 157-158. Meeting Info.: 7th International Symposium on VIP, PACAP and Related

Peptides. Rouen, FRANCE. September 11 -14, 2005. Conseil Reg Haute-Normandie; Agglomerat Rouen; Inst Fed Rech Multidisciplinaires

Peptides; Inst Natl Sante Rech Med; Municipal Rouen; Sci Act Haute-Normandie; Tech Chime-Biol Sante; Univ Paris 7; Univ Rouen.

CODEN: REPPDY. ISSN: 0167-0115.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 5 Apr 2006 Last Updated on STN: 5 Apr 2006

L5 ANSWER 13 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

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STN
ΑN
     2005:447062 BIOSIS
DN
     PREV200510235533
TΙ
     Innervation induced by cystitis. Comparison of experimental
cystitis
     modelin pigs versus interstitial cystitis in humans.
     Radziszewski, P. [Reprint Author]; Bossowska, A.; Borkowski, A.;
ΑU
Majewski,
     Μ.
     European Urology Supplements, (MAR 2005) Vol. 4, No. 3, pp. 58.
SO
     Meeting Info.: 20th Annual Meeting of the
European-Association-of-Urology.
     Istanbul, TURKEY. 20050317,. European Assoc Urol.
     ISSN: 1569-9056.
     Conference; (Meeting)
DT
     Conference; Abstract; (Meeting Abstract)
LA
     English
ED
     Entered STN: 3 Nov 2005
     Last Updated on STN: 3 Nov 2005
L5
     ANSWER 14 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson
Corporation on
                                                         DUPLICATE 5
     STN
AN
     2005:8558 BIOSIS
DN
     PREV200500004621
ΤI
     Intravesical botulinum toxin A administration produces analgesia
against
     acetic acid induced bladder pain responses in rats.
     Chuang, Yao-Chi [Reprint Author]; Yoshimura, Naoki; Huang,
ΑU
Chao-Cheng;
     Chiang, Po-Hui; Chancellor, Michael B.
     Suite 700, Kaufmann Bldg, 3471 5th Ave, Pittsburgh, PA, 15213, USA
CS
     chancellormb@msx.upmc.edu
     Journal of Urology, (October 2004) Vol. 172, No. 4, Part 1, pp.
SO
1529-1532.
     print.
     CODEN: JOURAA. ISSN: 0022-5347.
DT
     Article
LA
     English
ED
     Entered STN: 16 Dec 2004
     Last Updated on STN: 16 Dec 2004
     Purpose: There is evidence that botulinum toxin A (BTX-A) might
AΒ
have
     analgesic properties. However, the mechanisms by which BTX-A
alters pain
     remain largely unexplored. In the bladder afferent nerve fibers
contain
     calcitonin gene-related peptide (
     CGRP). In this study we investigated the effect of intravesical
     BTX-A administration on CGRP immunoreactivity and bladder
     hyperactivity in an acetic acid induced bladder pain model in
rats.
```

Materials and Methods: Experimental and control animals were catheterized

and intravesically exposed to protamine sulfate (1 ml, 10 mg/ml), followed

by BTX-A (1 ml, 25 U/ml) or saline, respectively. Three or 7 days after

intravesical therapy continuous cystometrograms were performed using

urethane anesthesia by filling the bladder (0.08 ml per minute) with

saline, followed by 0.3% acetic acid. Bladder immunohistochemistry was $\frac{1}{2}$

used to detect CGRP. Results: The intercontraction interval (ICI) was decreased after acetic acid instillation (50.2% and 65.0%) in

the control group at days 3 and 7, respectively. However, rats that

received BTX-A showed a significantly decreased response (28.6% $\ensuremath{\mathsf{ICI}}$

decrease) to acetic acid instillation at day 7. This effect was not

observed at day 3 (62.2% ICI decrease). Increased CGRP immunoreactivity was detected in the BTX treated group at day 7, which was

not detected at day 3. Conclusions: Intravesical BTX administration $\ensuremath{\text{3}}$

blocked acetic acid induced bladder pain responses and inhibited CGRP release from afferent nerve terminals. These results support

the clinical application of BTX-A for the treatment of interstitial cystitis and other types of visceral pain.

L5 ANSWER 15 OF 27 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights

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AN 2004315260 EMBASE

TI Experimental neurogenic cystitis.

AU Jasmin, Luc (correspondence); Janni, Gabriella

CS Department of Neurological Surgery, University of California, San Francisco, CA, United States.

SO Advances in Experimental Medicine and Biology, (2004) Vol. 539 A, pp.

319-335.

Refs: 86

ISSN: 0065-2598 CODEN: AEMBAP

CY United States

DT Journal; Conference Article; (Conference paper)

FS 021 Developmental Biology and Teratology

028 Urology and Nephrology

OO5 General Pathology and Pathological Anatomy

Neurology and Neurosurgery

009 Surgery

- LA English
- SL English
- ED Entered STN: 12 Aug 2004 Last Updated on STN: 12 Aug 2004
- AB Recent advances in basic and clinical research indicate that interstitial cystitis (IC) is a form of neurogenic

inflammation, thereby opening new avenues for research into this painful

disease. With this in mind, we have recently developed a rat model of

neurogenic inflammation of the bladder produced by a central nervous

system viral disease. As in IC, the inflammation in this model develops

without direct injury or trauma to the bladder, is non-infectious, and is

limited to the bladder. Our most recent studies aimed at further testing

the similarity of this animal model to IC by assessing the urine content

in histamine with the occurrence of mast cell degranulation in the bladder

wall. We further verified for a sex difference in the occurrence of the

disease. Our results showed increased levels of urine histamine and mast $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

cell activation during the early stages of the disease. We additionally

observed that females had a greater degree of plasma extravasation, while $% \left(1\right) =\left(1\right) +\left(1\right) +$

males had a greater cellular infiltration together with worse behavioral

signs. Gonadectomy prevented the bladder inflammation altogether in both $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

males and females. These findings further validate our model of neurogenic cystitis to study the neurogenic component of IC.

L5 ANSWER 16 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2004:256199 BIOSIS

DN PREV200400256219

TI Efficacy and safety of recombinant human anti-NGF antibody in the treatment of IC.

AU Dimitrakov, Jordan D. [Reprint Author]; Dikov, Dorian [Reprint Author]

CS Plovdiv, Bulgaria

SO Journal of Urology, (April 2004) Vol. 171, No. 4 Supplement, pp. 95.

print.

Meeting Info.: Annual Meeting of the American Urological Association. San

Francisco, CA, USA. May 08-13, 2004. American Urological Association. CODEN: JOURAA. ISSN: 0022-5347. DT Conference; (Meeting) Conference; Abstract; (Meeting Abstract) English LA Entered STN: 12 May 2004 ΕD Last Updated on STN: 12 May 2004 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All L5ANSWER 17 OF 27 rights reserved on STN 2003501773 EMBASE ΑN Special Contribution 1: The basics behind bladder pain: A review ТΙ of data on lower urinary tract sensations. ΑU Wyndaele, J.J., Dr. (correspondence); De Wachter, Stefan Department of Urology, Faculty of Medicine, University of CS Antwerpen, Belgium. Jean-Jacques. Wyndaele@uza.be ΑU Wyndaele, J.J., Dr. (correspondence) Department of Urology, UZA, 10 Wilrijkstraat, B 2650 Edegem, CS Belgium. Jean-Jacques.Wyndaele@uza.be International Journal of Urology, (Oct 2003) Vol. 10, No. SO SUPPL., pp. S49-S55. Refs: 86 ISSN: 0919-8172 CODEN: IJURF3 CY Australia DT Journal; Conference Article; (Conference paper) Urology and Nephrology FS 028 006 Internal Medicine English LA SL English Entered STN: 30 Dec 2003 ED Last Updated on STN: 30 Dec 2003 Interstitial cystitis is a syndrome consisting of AB frequency, urgency, and bladder pain that increases with bladder filling and improves temporarily after voiding. The exact cause or causes are not as yet fully understood. This leads to uncertainty in diagnosis and There is need for more knowledge, and to acquire treatment. this for more The fact that the condition causes pain, a pathologic research. stimulation of sensory fibres, makes understanding the basic sensory mechanisms in the lower urinary tract in normal and pathologic

In this article we review the data on bladder

conditions

sensation from

mandatory.

the last 25 years and the possible relation with painful bladder syndrome.

L5 ANSWER 18 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2002:2909 BIOSIS

DN PREV200200002909

TI Alterations in bladder afferent neurons and urothelium in cats with

interstitial cystitis.

AU Buffington, C. A. [Reprint author]; Kiss, S.; Roppolo, J. R.; de Groat, W.

C.; Dineley, K. E.; Reynolds, I. J.; Birder, L. A.

CS College Veterinary Medicine, Ohio State University, Columbus, OH, USA

SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 2, pp. 2163.

print.

Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San

Diego, California, USA. November 10-15, 2001.

ISSN: 0190-5295.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 28 Dec 2001

Last Updated on STN: 25 Feb 2002

AB Experiments were conducted in cats with feline interstitial cystitis (IC) to evaluate whether the chemical properties and/or intracellular signaling mechanisms in afferent neurons and epithelial

cells in the urinary bladder (UB) are altered in IC. UB dorsal root

ganglion (DRG) cells were identified by axonal tracing (fast blue) and

sections of DRG, spinal cord (SC) and UB were processed for neuropeptides $% \left(1\right) =\left(1\right) +\left(1\right) +$

(CGRP, VIP). In IC cats, the number of CGRP

-immunoreactive dye-labelled, bladder DRG cells was increased by 50% and

the mean size of labelled DRG cells was increased (45%). Afferent (VIP, α

CGRP) fiber density in UB and sacral spinal cord also increased in

IC. In addition, epithelial cells in IC cats exhibited abnormal calcium

signaling. In urothelial cells from normal cat UB, ATP mobilized intracellular calcium via activation of P2Y receptors, whereas both P2X

and P2Y receptors were involved in this response in cells from ${\tt IC}$ cats.

In addition, compared to normal cats, cultured urothelial cells from ${\tt IC}$

cats exhibited a significant increase (90%) in stretch-evoked ATP release

induced by a hypo-osmotic stimulus measured using a luciferin-luciferase

assay. ATP release was blocked by gadolinium, an inhibitor of stretch

activated channels. These studies revealed that IC cats have an altered

urothelium which in turn may influence afferent excitability. Changes in

neural-epithelial interactions may correlate with abnormal sensations in

IC.

L5 ANSWER 19 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN DUPLICATE 6

AN 2001:345507 BIOSIS

DN PREV200100345507

TI Cell relationship in a wistar rat model of spontaneous prostatitis.

AU Keith, Ingegerd M. [Reprint author]; Jin, Jie; Neal, Durwood, Jr.;

Teunissen, Brian D.; Moon, Timothy D.

CS Departments of Comparative Bioscience and Surgery, University of Wisconsin

and Veterans Affairs Medical Center, Madison, WI, USA

SO Journal of Urology, (July, 2001) Vol. 166, No. 1, pp. 323-328. print.

CODEN: JOURAA. ISSN: 0022-5347.

DT Article

LA English

ED Entered STN: 25 Jul 2001

Last Updated on STN: 19 Feb 2002

AB Purpose: Prostatitis in men is a painful, noninfectious inflammatory

condition. It is similar to interstitial cystitis

which is associated with increased bladder mast cell and sensory nerve

fiber density as well as suprapubic pain. Certain strains of rats may

provide a useful model for studies of the development of spontaneous $% \left(1\right) =\left(1\right) +\left(1\right$

prostatitis. We evaluated the time course, and involvement of mast cells

and sensory nerve fibers in this process using Wistar rats. Materials and

Methods: The prostates of 4, 6, 8, 10 and 13-week-old male Wistar rats

were examined for the degree of inflammation, innervation, mast cell

density and nerve mast cell relationship using histochemical and immunocytochemical studies. Bacterial cultures of tissue were performed

at 13 weeks. Results: The inflammatory cell index increased progressively

with age. Inflammation was moderate and consisted mostly of lymphocytes

and macrophages associated with occasional glandular epithelial necrosis

and edema. The density of nerve fibers immunoreacting with the neuronal

marker protein gene produce 9.5 increased gradually with age and fibers

immunopositive for the sensory neuropeptide calcitonin gene-related peptide more than doubled by 13

weeks compared with by 4 weeks. The density of visible mast cells

declined after 4 weeks in a pattern that corresponded with the increased

percent of mast cells undergoing degranulation. For the mast cells with

calcitonin gene-related peptide

immuno-positive nerve fibers within a distance of 40 mum. distance

correlated significantly with the degree of degranulation. Bacterial

cultures were negative at 13 weeks. Conclusions: Our results confirm

previous reports of spontaneous prostatitis in Wistar rats and indicate

that moderate inflammation may occur in 80% of rats at as early as age 13

weeks. While the correlation of the nerve mast cell axis with mast cell

degranulation does not prove our hypothesis of mast cell mediated inflammatory mediator release in the development of nonbacterial prostatitis, it suggests that such a relationship is possible.

L5 ANSWER 20 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN DUPLICATE 7

AN 2001:284434 BIOSIS

DN PREV200100284434

TI Alterations in neuropeptide expression in lumbosacral bladder pathways

following chronic cystitis.

AU Vizzard, Margaret A. [Reprint author]

CS Department of Anatomy and Neurology, University of Vermont College of

Medicine, E219 Given Building, Burlington, VT, 05405, USA mvizzard@zoo.uvm.edu

SO Journal of Chemical Neuroanatomy, (March, 2001) Vol. 21, No. 2, pp.

125-138. print.

CODEN: JCNAEE. ISSN: 0891-0618.

DT Article

LA English

ED Entered STN: 13 Jun 2001

Last Updated on STN: 19 Feb 2002

AB These studies examined changes in the expression of calcitonin gene-related peptide (CGRP) and

substance P (SP) in lumbosacral (L6-S1) micturition reflex pathways,

following chronic cystitis induced by cyclophosphamide (CYP). In control

Wistar rats, CGRP- or SP-immunoreactivity (IR) was expressed in fibers in the superficial dorsal horn in all segmental levels examined

(L4-S1). Bladder afferent cells in the dorsal root ganglia (DRG; L6, S1)

from control animals also exhibited CGRP-(41-55%) or SP-IR (2-3%). Following chronic, CYP-induced cystitis, CGRP- and SP-IR were dramatically increased in spinal segments and DRG (L6, S1)

involved in micturition reflexes. The density of CGRP- and SP-IR was increased in the superficial laminae (I-II) of the L6 and S1 $\,$

spinal segments. No changes in CGRP- or SP-IR were observed in the L4-L5 segments. Staining was also dramatically increased in a fiber

bundle extending ventrally from Lissauer's tract in lamina I along the

lateral edge of the DH to the sacral parasympathetic nucleus in the L6-S1

spinal segments. Following chronic cystitis, CGRP- and SP-IR in cells in the L6 and S1 DRG significantly (P ltoreq 0.05) increased and the

percentage of bladder afferent cells expressing CGRP- (76%) or SP-IR (11-18%) also significantly (P ltoreq 0.001) increased. No changes

were observed in the L4-L5 DRG. These studies suggest that the neuropeptides, CGRP and SP, may play a role in urinary bladder afferent pathways, following chronic urinary bladder inflammation.

Changes in CGRP or SP expression following cystitis may contribute to the altered visceral sensation (allodynia) and/or urinary

bladder hyperreflexia in the clinical syndrome, interstitial cystitis.

L5 ANSWER 21 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN DUPLICATE 8

AN 2000:172201 BIOSIS

DN PREV200000172201

TI Increased tyrosine hydroxylase immunoreactivity in bladder tissue from

patients with classic and nonulcer interstitial cystitis

AU Peeker, Ralph [Reprint author]; Aldenborg, Frank; Dahlstrom, Annica;

Johansson, Sonny L.; Li, Jia-Yi; Fall, Magnus

CS Urology Division, Department of Surgery, Sahlgrenska University Hospital,

Goteborg, Sweden

SO Journal of Urology, (April, 2000) Vol. 163, No. 4, pp. 1112-1115. print.

CODEN: JOURAA. ISSN: 0022-5347.

DT Article

LA English

ED Entered STN: 3 May 2000

Last Updated on STN: 4 Jan 2002

AB Purpose: Interstitial cystitis is a chronic

debilitating condition which mainly affects women. Accumulated evidence

indicates that interstitial cystitis is a

heterogeneous syndrome. The nonulcer subtype appears different than

classic interstitial cystitis in regard to symptoms,

and endoscopic and histological findings as well as response to various

treatments. We further explore the neurogenic nature of this disease

using indirect immunofluorescence to evaluate the presence and density of

various autonomic and sensory nerve fibers. Materials and Methods:

Specimens from the bladder wall of 6 patients with classic interstitial cystitis, 7 with nonulcer

interstitial cystitis and 6 controls were evaluated to

determine the presence and density of nerve fibers containing tyrosine $\ensuremath{\mathsf{T}}$

hydroxylase, calcitonin gene-related

peptide, neuropeptide \mathbf{Y} and substance \mathbf{P} using specific antibodies,

and the general presence of nerve fibers using a mixture of antibodies

against nerve filament, neuron specific enolase and S-100 protein.

Results: Increased density and number of nerve fibers immunoreactive for

tyrosine hydroxylase were noted in interstitial cystitis cases compared to controls. Furthermore, there was a difference between

classic and nonulcer disease in the overall density of nerves using the $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

antibody mixture. Conclusions: Our findings indicate an altered

peripheral sympathetic innervation in interstitial cystitis cases, which may be an indication of primary neurogenic etiology. The difference in nerve density observed after incubation with

the antibody mixture between classic and nonulcer interstitial cystitis supports the hypothesis that the 2 forms represent separate entities.

L5 ANSWER 22 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN DUPLICATE 9

AN 2000:221490 BIOSIS

DN PREV200000221490

TI Up-regulation of pituitary adenylate cyclase-activating polypeptide in

urinary bladder pathways after chronic cystitis.

AU Vizzard, Margaret A. [Reprint author]

CS College of Medicine, Department of Neurology, University of Vermont, E219

Given Building, Burlington, VT, 05405, USA

SO Journal of Comparative Neurology, (May 8, 2000) Vol. 420, No. 3, pp.

335-348. print.

CODEN: JCNEAM. ISSN: 0021-9967.

DT Article

LA English

ED Entered STN: 31 May 2000

Last Updated on STN: 5 Jan 2002

AB These studies examined changes in the expression of pituitary adenylate

cyclase-activating polypeptide (PACAP) in micturition reflex pathways after chronic cystitis induced by cyclophosphamide (CYP). In

control Wistar rats, PACAP immunoreactivity was expressed in fibers in the superficial dorsal horn at all segmental levels examined

(L1, L2, and L4-S1). Bladder afferent cells (40-45%) in the dorsal root

ganglia (DRG; L1, L2, L6, and S1) from control animals also exhibited

PACAP immunoreactivity. After chronic, CYP-induced cystitis, PACAP immunoreactivity increased dramatically in spinal segments and DRG (L1, L2, L6, and S1) involved in micturition reflexes.

The

density of PACAP immunoreactivity was increased in the superficial laminae (I-II) of the L1, L2, L6, and S1 spinal segments. No

changes in PACAP immunoreactivity were observed in the L4-L5 segments. Staining also increased dramatically in a fiber bundle extending ventrally from Lissauer's tract in lamina I along the teral

edge of the dorsal horn to the sacral parasympathetic nucleus in the L6-S1

spinal segments (lateral collateral pathway of Lissauer). After chronic

cystitis, PACAP immunoreactivity in cells in the L1, L2, L6, and S1 DRG increased significantly (P ltoreq 0.0001), and the percentage of

bladder afferent cells expressing PACAP immunoreactivity also increased significantly (P ltoreq 0.0001; 70-85%). No changes were

observed in the L3-L5 DRG. These studies suggest that the neuropeptide, $\$

PACAP, may play a role in urinary bladder afferent pathways after visceral (urinary bladder) inflammation. Changes in PACAP expression after cystitis may play a role in altered visceral sensation

(allodynia) and/or urinary bladder hyperreflexia in the clinical syndrome,

interstitial cystitis.

L5 ANSWER 23 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2001:96859 BIOSIS

DN PREV200100096859

TI Alterations in urothelium and bladder afferents in feline interstitial cystitis.

AU Buffington, C. A. [Reprint author]; Kiss, S.; Kanai, A. J.; Dineley, K.;

Roppolo, J. R.; Reynolds, I. J.; de Groat, W. C.; Birder, L. A. CS Ohio State University, Columbus, OH, USA

SO Society for Neuroscience Abstracts, (2000) Vol. 26, No. 1-2, pp. Abstract

No.-349.2. print.

Meeting Info.: 30th Annual Meeting of the Society of Neuroscience. New

Orleans, LA, USA. November 04-09, 2000. Society for Neuroscience.

ISSN: 0190-5295.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 21 Feb 2001

Last Updated on STN: 15 Feb 2002

AB The properties of bladder afferent neurons and urothelial cells were

examined in normal cats and in cats diagnosed with FIC, a chronic painful

disorder of the urinary bladder (UB). The UB, sacral dorsal root ganglia

(DRG) and spinal cord (SC), were removed from an esthetized adult cats of

either sex before or after perfusion fixation. Small numbers of c-jun-immunoreactive bladder DRG cells were detected in normal cats (<4

cells/section), but the numbers increased (200%) in cats with FIC. UB-DRG

cells, labeled by axonal tracers were larger (25%) in FIC cats. The $\,$

density of substance P and CGRP containing afferent nerves in the UB and spinal dorsal horn was greater in FIC cats. Basal nitric oxide

(NO) release, measured with a microsensor in bladder strips, was

in FIC cats but not in normal cats, whereas NO release evoked by capsaicin

was decreased (60%) in normal cats. The UB of FIC cats displayed regions

of denuded uroepithelium as evidenced by changes in cytokeratin staining.

In cultured uroepithelial cells intracellular calcium measurements using

Fura-2 and fluorescent microscopic techniques revealed that sensitivity to

purinergic agents was altered in FIC cats. Activation of P2Y receptors

 $(2-methylthio\ ATP)$ increased calcium in normal cats, whereas activation of

P2X (alpha, beta methylene ATP) or P2Y receptors was effective in FIC cats.

These studies raise the possibility that changes in properties of afferent

nerves and/or the urothelium may contribute to the painful symptoms in ${\sf FIC.}$

L5 ANSWER 24 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 1999:160213 BIOSIS

DN PREV199900160213

TI Autonomous neuropathy in interstitial cystitis.

AU Peeker, Ralph [Reprint author]; Aldenborg, Frank [Reprint author]; Li,

Jia-Yi [Reprint author]; Fall, Magnus [Reprint author];
Dahlstrom, Annica

[Reprint author]; Johansson, Sonny L.

CS Gothenburg, Sweden

SO Journal of Urology, (April, 1999) Vol. 161, No. 4 SUPPL., pp. 28. print.

Meeting Info.: 94th Annual Meeting of the American Urological Association,

Inc. Dallas, Texas, USA. May 1-6, 1999. American Urological Association.

CODEN: JOURAA. ISSN: 0022-5347.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LAEnglish EDEntered STN: 16 Apr 1999 Last Updated on STN: 16 Apr 1999 ANSWER 25 OF 27 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All L5rights reserved on STN ΑN 1997291246 EMBASE ΤI Neurophysiology of micturition and continence in women. Chai, T.C.; Steers, W.D., Prof. (correspondence) ΑU CS University of Virginia Health Sciences Center, Department of Urology, Charlottesville, VA, United States. Steers, W.D., Prof. (correspondence) ΑU University of Virginia Health Sciences Center, Department of CS Urology, Box 422, Charlottesville, VA 22908, United States. Steers, W.D., Prof. (correspondence) ΑU CS Univ. Virginia Health Sciences Ctr., Department of Urology, Box 422, Charlottesville, VA 22908, United States. International Urogynecology Journal and Pelvic Floor SO Dysfunction, (1997) Vol. 8, No. 2, pp. 85-97. Refs: 150 ISSN: 0937-3462 CODEN: IUFDFV CY United Kingdom Journal; General Review; (Review) DTFS Obstetrics and Gynecology 010 028 Urology and Nephrology 030 Clinical and Experimental Pharmacology 037 Drug Literature Index 008 Neurology and Neurosurgery LA English SL English Entered STN: 9 Oct 1997 ED Last Updated on STN: 9 Oct 1997 Micturition and continence involve the coordination of complex AΒ neural events between the central and peripheral nervous systems. An understanding of these events provides a foundation for the treatment of voiding disorders in women such as stress urinary incontinence, urge incontinence and interstitial cystitis. The purpose of this paper is to comprehensively review the neuroanatomy, neurophysiology and neuropharmacology of micturition and continence. However, a brief section discussing clinical correlations will follow each

of these topics to help integrate the basic science with clinical

obervations.

L5 ANSWER 26 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN DUPLICATE 10

AN 1992:218126 BIOSIS

DN PREV199293118351; BA93:118351

TI INTERSTITIAL CYSTITIS INCREASED SYMPATHETIC INNERVATION AND RELATED NEUROPEPTIDE SYNTHESIS.

AU HOHENFELLNER M [Reprint author]; NUNES L; SCHMIDT R A; LAMPEL A; THUEROFF

J W: TANAGHO E A

CS DEP UROL, KLINIKUM BARMEN, HEUSNERSTR 40, 5600 WUPPERTAL, WEST GERMANY

SO Journal of Urology, (1992) Vol. 147, No. 3 PART 1, pp. 587-591. CODEN: JOURAA. ISSN: 0022-5347.

DT Article

FS BA

An

may

LA ENGLISH

ED Entered STN: 4 May 1992

Last Updated on STN: 5 May 1992

AB To investigate the possibility of a neural deterioration of the bladder

wall in interstitial cystitis, bladder tissue from 10 patients with interstitial cystitis was compared with that from 10 control subjects by means of immunohistochemistry.

enhanced innervation of the bladder in the submucosa and detrusor muscle

was found to represent an increase of sympathetic but not cholinergic

neurons. In interstitial cystitis the number of neurons positive for vasoactive intestinal polypeptide and neuropeptide Υ

was higher and carried a larger number of axonal varicosities, whereas the $\ensuremath{\mathsf{N}}$

number of neurons positive for substance P and calcitoningene-related peptide was not significantly

different in both groups. We conclude that interstitial cystitis is associated with increased sympathetic outflow into the

bladder and altered metabolism of vasoactive intestinal polypeptide and

neuropeptide Y. Since similar changes have been observed in other

inflammatory diseases of a presumably autoimmune nature, such as rheumatoid arthritis, Crohn's disease and colitis ulcerosa, the pathophysiology of interstitial cystitis may share common pathways with the latter. Experience in these diseases

facilitate a better understanding of the pathophysiology of interstitial cystitis and suggest new therapeutic concepts.

L5 ANSWER 27 OF 27 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 1992:298493 BIOSIS

DN PREV199243010843; BR43:10843

TI IMMUNOHISTOCHEMICAL EXAMINATION OF NEUROPEPTIDES AND M-2 MUSCARINIC

RECEPTORS IN NORMAL AND INTERSTITIAL CYSTITIS IC BLADDERS.

AU SHICKLEY T J [Reprint author]; LUTHIN G F; RUGGIERI M R

CS PHILADELPHIA, PA, USA

SO Journal of Urology, (1992) Vol. 147, No. 4 SUPPL, pp. 462A. Meeting Info.: AUA (AMERICAN UROLOGICAL ASSOCIATION)

EIGHTY-SEVENTH ANNUAL

MEETING, WASHINGTON, D.C., USA, MAY 10-14, 1992. J UROL. CODEN: JOURAA. ISSN: 0022-5347.

DT Conference; (Meeting)

FS BR

LA ENGLISH

ED Entered STN: 16 Jun 1992

Last Updated on STN: 16 Jun 1992

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(FILE 'HOME' ENTERED AT 17:14:58 ON 25 JAN 2010)

FILE 'BIOSIS, CAPLUS, EMBASE' ENTERED AT 17:15:16 ON 25 JAN 2010 L1 31928 S CALCITONIN GENE RELATED PEPTIDE OR CGRP L2 9041 S PITUITARY ADENYLATE CYCLASE ACTIVATING PEPTIDE OR PACAP

L3 40576 S L1 OR L2

L4 43 S L3 AND INTERSTITIAL CYSTITIS

L5 27 DUP REM L4 (16 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 17:23:30 ON 25 JAN 2010

FILE 'BIOSIS, CAPLUS, EMBASE' ENTERED AT 17:35:03 ON 25 JAN 2010 4413 S INTERSTITIAL CYSTITIS

=> s 16 and diagnos?

L7 1735 L6 AND DIAGNOS?

=> s 17 and review

L8 316 L7 AND REVIEW

=> d bib abs 1-10

L8 ANSWER 1 OF 316 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2010:6079 BIOSIS

DN PREV20100006079

TI Bladder Outlet Obstruction in Painful Bladder Syndrome/ Interstitial Cystitis.

AU Cameron, Anne P. [Reprint Author]; Gajewski, Jerzy B.

CS 1500 Med Ctr Dr,3875 Taubman Ctr, Ann Arbor, MI 48109 USA annepell@med.umich.edu

SO Neurourology and Urodynamics, (2009) Vol. 28, No. 8, pp. 944-948.

CODEN: NEUREM. ISSN: 0733-2467.

DT Article

LA English

ED Entered STN: 9 Dec 2009

Last Updated on STN: 9 Dec 2009

AB Aims: Obstructive symptoms such as slow stream, dribbling and straining

are often reported by painful bladder syndrome and interstitial cystitis (PBS/IC) patients. Our hypothesis was that some patients

with PBS/IC have an associated measurable bladder outlet obstruction (BOO)

secondary to dysfunctional voiding and that those patients with more

severe PBS/IC are more likely to have BOO. Methods: This is a retrospective chart review of female patients diagnosed

with PBS/IC based on the NIDDK research definition. Charts were reviewed

for clinical symptom severity, ulcer or non-ulcer PBS/IC on cystoscopy,

and pressure-flow urodynamics (UDPF). Patients were excluded if they had

a urinary infection at the time of urodynamics or did not meet study entry

requirements. The cut-off values of <= 12 ml/sec and >= 25 cm of water

was used to define BOO. Results: Of the 231 women: 38 had ulcer PBS/IC

and 193 had non-ulcer PBS/IC. MCC was 269 ml in non-ulcer PBS/IC and 200 $\,$

ml in ulcer PBS/IC (P = 0.006). One hundred eleven women (48%) met

criteria for obstruction. MCC was 298 ml in the non-obstructed group and $\,$

214 ml in the obstructed group (P < 0.0001). The maximum flow with

non-ulcer PBS/IC was 11.0 ml/sec and in ulcer PBS/IC 8.9 ml/sec (P = 0.04)

Detrusor pressure at maximum flow was 33.3 cm H2O, in non-ulcer, and $37.4\,$

cm H2O in ulcer PBS/IC (P = 0.01). Conclusions: Forty-eight percent of

our PBS/IC patients have BOO, and increasing severity of PBS/IC is $\frac{1}{2}$

associated with higher voiding pressure. Neurourol. Urodynam. 28:944-948, 2009. (C) 2009 Wiley-Liss, Inc.

L8 ANSWER 2 OF 316 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2009:298223 BIOSIS

DN PREV200900299326

TI Developmental Influences on Medically Unexplained Symptoms.

AU Buffington, C. A. Tony [Reprint Author]

CS Ohio State Univ, Vet Hosp, 601 Tharp St, Columbus, OH 43210 USA Buffington.1@osu.edu

SO Psychotherapy and Psychosomatics, (2009) Vol. 78, No. 3, pp. 139-144.

CODEN: PSPSBF. ISSN: 0033-3190.

DT Article

General Review; (Literature Review)

LA English

ED Entered STN: 6 May 2009

Last Updated on STN: 20 May 2009

AB Background: Medically unexplained (or 'functional') symptoms (MUS) are

physical symptoms that prompt the sufferer to seek healthcare but remain

unexplained after an appropriate medical evaluation. Examples of MUS also

occur in veterinary medicine. For example, domestic cats suffer a

syndrome comparable to interstitial cystitis, a

chronic pelvic pain syndrome of humans. Method: Review of current evidence suggests the hypothesis that developmental factors may

play a role in some cases of MUS. Maternal perception of a threatening

environment may be transmitted to the fetus when hormones cross the

placenta and affect fetal physiology, effectively 'programming'
the fetal

stress response system and associated behaviors toward enhanced vigilance.

After birth, intense stress responses in the individual may result in

similar vulnerability, which may be unmasked by subsequent stressors.

Results: Epigenetic modulation of gene expression (EMGEX) appears to play

a central role in creation of this 'survival phenotype'. The recent

development of techniques to identify the presence of ${\tt EMGEX}$ provides new

tools to investigate these questions, and drugs and other interventions $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

that may reverse EMGEX are also under active investigation. Conclusion:

Viewing MUS from the perspective of underlying developmental influences

involving EMGEX that affect function of a variety of organs based on $% \left(1\right) =\left(1\right) +\left(1\right$

familial (genetic and environmental) predispositions rather than from the

traditional viewpoint of isolated organoriginating diseases has at least

two important implications: it provides a parsimonious explanation for

findings heretofore difficult to reconcile, and it opens whole new areas

of investigation into causes and treatments for this class of disorders.

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L8 ANSWER 3 OF 316 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2009:185242 BIOSIS

DN PREV200900185242

TI Breaking the Cycle of Pain in Interstitial Cystitis /Painful Bladder Syndrome Toward Standardization of Early Diagnosis and Treatment.

AU Forrest, John B. [Reprint Author]; Mishell, Daniel R. Jr.

CS 10901 E 48th St S, Tulsa, OK 74146 USA jforrest@sjmc.org

SO Journal of Reproductive Medicine, (JAN 2009) Vol. 54, No. 1, pp. 3-14.

CODEN: JRPMAP. ISSN: 0024-7758.

DT Article

General Review; (Literature Review)

LA English

ED Entered STN: 11 Mar 2009 Last Updated on STN: 11 Mar 2009

AB Chronic pelvic pain (CPP) affects about 15% of female adults in the United

States. The source of this pain in many women is the bladder, specifically interstitial cystitis/painful bladder

syndrome (IC/PBS). Despite the frequent occurrence of IC/PBS as a cause

of CPP, there currently are no universally accepted guidelines for

diagnosis and treatment of this disorder, and, consequently, many patients do not receive appropriate treatment in a timely manner. In an

effort to develop a rational way to diagnose and treat patients With CPP, a panel of leaders in urology, gynecology, urogynecology and

general women's health met to review recent literature, reach consensus and formulate 2 algorithms, one for diagnosing and the other for managing IC/PBS. This article reflects the results of that

meeting. (J Reprod Med 2009;54:3-14)

L8 ANSWER 4 OF 316 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

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AN 2009:162050 BIOSIS

DN PREV200900162050

TI The Spectrum of Eosinophilic Cystitis in Males Case Series and Literature

Review.

AU Popescu, Oana-Eugenia; Landas, Steve K. [Reprint Author]; Haas, Gabriel P.

CS State Univ New York Upstate Med Univ, Dept Pathol and Urol, 750 E Adams

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SO Archives of Pathology & Laboratory Medicine, (FEB 2009) Vol.

133, No. 2,

pp. 289-294.

CODEN: APLMAS. ISSN: 0003-9985.

DT Article

LA English

ED Entered STN: 4 Mar 2009

Last Updated on STN: 4 Mar 2009

AB Context.-Eosinophilic cystitis (EC) is an inflammatory condition of the

bladder that has been linked to food allergens, infectious agents, drugs,

and other genitourinary conditions. Like interstitial cystitis, EC has a strong female predominance. It is

characterized by an intense eosinophilic infiltrate in the acute phase and

fibrosis in the chronic phase.Objectives.-To document and focus on

specific features of EC in males and highlight the relationship between

clinical and histopathologic findings. Design. - The bladder biopsies of male

patients were reviewed. Eight cases of EC were selected. Results. - Several

known associations were noted as well as unreported features and associations such as Charcot-Leyden crystals, celiac disease, lupus

anticoagulant, and additional viral and bacterial

agents.Conclusions.-Eosinophilic cystitis represents a response to a

variety of agents and may often be overlooked. The temporally biphasic

morphologic features are the hallmark of this condition. Because clinical

and imaging studies are not specific, a high index of clinical suspicion

is often crucial to the correct diagnosis and proper management of EC.

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AN 2008:538440 BIOSIS

DN PREV200800538439

TI Disorders of adhesions or adhesion-related disorder: Monolithic entities

or part of something bigger - CAPPS?.

AU Wiseman, David M. [Reprint Author]

CS Int Adhes Society, PMB 238,6757 Arapaho, Suite 711-238, Dallas,

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SO Seminars in Reproductive Medicine, (JUL 2008) Vol. 26, No. 4, pp. 356-368.

ISSN: 1526-8004.

DT Article

LA English

ED Entered STN: 1 Oct 2008

Last Updated on STN: 1 Oct 2008

AB The purpose of this article is to review progress in the field of abdominopelvic adhesions and the validity of its two underlying

assumptions: (1) The formation of adhesions results in infertility, bowel

obstruction, or other complications. Reducing or avoiding adhesions will

curb these sequelae. (2) "Adhesions" is a monolithic entity to be tackled

without regard to any other condition. Evidence is discussed to validate

the first assumption. We reviewed progress in the field by examining $% \left(1\right) =\left(1\right) +\left(1\right$

hospital data. We found a growing trend in the number and cost of

discharges for just two adhesion-related diagnoses, and the low usage of adhesion barriers appears in at most 5% of appropriate procedures. Data from an Internet-based survey suggested that the problem

 $\ensuremath{\mathsf{may}}\xspace,$ be partly due to ignorance among patients and physicians about

adhesions and their prevention. Two other surveys of patients visiting the

adhesions.org Web site defined more fully adhesion-related disorder (ARD).

The first survey (N=466) described a patient with chronic pain, gastrointestinal disturbances, an average of nine bowel obstructions, and

an inability to work or maintain family or social relationships. The

second survey (687 U.S. women) found a high (co-) prevalence of abdominal

or pelvic adhesions (85%), chronic abdominal or pelvic pain (69%),

irritable bowel syndrome (55%), recurrent bowel obstruction (44%),

endometriosis (40%), and interstitial cystitis

(29%). This pattern Suggests that although "adhesions" may, start out as a

monolithic entity, an adhesions patient may develop related conditions

(ARD) until they merge into an independent entity where they are practically indistinguishable from patients with multiple symptoms

originating from other abdominopelvic conditions such as pelvic or bladder

pain. Rather than use terms that constrain the required multidisciplinary, biopsychosocial approach to these patients by the

paradigms of the specialty related to the patient's initial symptom set,

the term complex abdominopelvic and pain syndrome (CAPPS) is proposed. It

is essential to understand not only the pathogenesis of the "initiating"

conditions but also how they progress to CAPPS. In our ARD sample, not

only was the frequency of women with hysterectomies (56%) higher than

expected (21 to 33%), but also the rates of the "initiating" conditions

was 40 to 400% higher in patients with hysterectomies than in those

without. This may represent increased surgical trauma or the loss of

protection against oxidative stress. Related was the higher frequency of

ARD patients reporting hemochromatosis (HC; 5%) than expected (similar to

0.5%) and the higher rates (20 to 700%) of initiating conditions in

patients with HC than in those without HC. Together with findings related

to the toxicity of Intergel, these findings raise the possibility, that

heterozygotes for genes regulating oxidative stress are at greater risk of

developing surgical complications as well as more severe and progressive

conditions such as CAPPS.

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STN

AN 2008:395348 BIOSIS

DN PREV200800395347

TI Urinary tract infection and inflammation at onset of interstitial cystitis/painful bladder syndrome.

AU Warren, John W. [Reprint Author]; Brown, Vivian; Jacobs, Stephen; Horne,

Linda; Langenberg, Patricia; Greenberg, Patty

CS Univ Maryland, Sch Med, Dept Med, 10 S Pine St, Room 9-00 MSTF, Baltimore,

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Studyic@medicine.umaryland.edu

SO Urology, (JUN 2008) Vol. 71, No. 6, pp. 1085-1090. ISSN: 0090-4295.

DT Article

LA English

ED Entered STN: 16 Jul 2008 Last Updated on STN: 16 Jul 2008

AB OBJECTIVES Interstitial cystitis/painful bladder

syndrome (IC/PBS) is a chronic disease primarily in women that is of low

incidence and, unknown etiology and manifests as bladder pain and urinary

symptoms. Acute urinary tract infection (UTI) is of high incidence in

women, presents as dysuria and urinary symptoms, and is caused by uropathogenic bacteria. We hypothesized that UTI is present at the onset

of IC/PBS in some women.METHODS For a case-control study seeking risk

factors for IC/PBS, women with IC/PBS symptoms of 12 months or less were

recruited and evaluated by interview and medical record review. The date of symptom onset was identified by a six-step process. Three

evidence-based methods using culture, urinalysis, and symptoms were used

separately and in combination to diagnose UTI at IC/PBS onset.RESULTS Of 1177 screened women, 314 with recent-onset IC/PBS.

including numerous confirming characteristics, were enrolled in the study;

98% of the requested medical records were obtained and reviewed. Evidence

of a UTI at the onset of IC/PBS was found in 18% to 36% of women. Common $\,$

UTI features not used in its diagnosis (short interval to medical care, hematuria, antibiotic treatment, and improvement after

antibiotics) were significantly more common in those with onset UTI than

in those without. ${\tt CONCLUSIONS}$ These retrospective data suggest that a

proportion, probably a minority, of women at IC/PBS onset had evidence of

 $\,$ UTI or inflammation. Our results indicate that UTI is present at the

onset of IC/PBS in some women and might reveal clues to IC/PBS pathogenesis.

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AN 2008:304655 BIOSIS

DN PREV200800306707

TI Characterization of a clinical cohort of 87 women with interstitial cystitis/painful bladder syndrome.

AU Peters, Kenneth M.; Carrico, Donna J. [Reprint Author]; Diokno, Ananias C.

CS William Beaumont Hosp, Dept Urol, Ministrelli Program Urol Res and Educ,

3535 W 13 Mile Rd, Suite 438, Royal Oak, MI 48073 USA dcarrico@beaumont.edu

SO Urology, (APR 2008) Vol. 71, No. 4, pp. 634-640. ISSN: 0090-4295.

DT Article

LA English

ED Entered STN: 12 May 2008

Last Updated on STN: 12 May 2008

AB OBJECTIVE To provide a characterization of a cohort of women with interstitial cystitis/painful bladder syndrome (IC/PBS) by describing their historical and clinical characteristics.

This was

reported with the National Institutes of Health chronic prostatitis

cohort, but a literature review did not reveal a similar study for women with IC/PBS.METHODS A total of 87 women with IC/PBS were

referred to the Beaumont Women's Initiative for Pelvic Pain and Sexual

Health program. A certified nurse practitioner took a comprehensive

history and per-formed a pelvic exam for each. Data were analyzed using

descriptive statistics to describe this cohort.RESULTS Most women
 experienced constant pain for 5 or more years (mean Visual
Analog Scale =

5 out of 10). A total of 94.2% had levator pain. More than 50% had

vulvar pain with exam. More than half reported a history of abuse, often

in more than one life stage. A total of 28% had cesarean births and 76%

had a history of miscarriage, stillbirth, or abortion. Women averaged 4

lifetime pelvic surgeries, and 48% had hysterectomies, two-thirds of which

were done before IC/PBS diagnosis. Premenstrual women reported pain throughout the menstrual cycle. As many as 12% had chlamydia

previously, which was higher than the national average. Common comorbidities were pelvic pain (93%), allergies (86%), and sexual dysfunction (72%). CONCLUSIONS This population of women with unrelieved

chronic pain, frequency, and urgency is in desperate need of care.

Researchers should continue to search for the etiology, prevention, and

treatment interventions that are effective in dealing with IC/PBS. It may

be most the rapeutic to develop a multimodal plan of care that includes

physical therapy, oral and intravesical therapies, neuromodulation, and

cognitive-behavioral therapies.

L8 ANSWER 8 OF 316 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2008:139703 BIOSIS

DN PREV200800138354

TI Reprogramming requirements after sacral nerve stimulator implantation:

Correlation with preoperative indication.

AU Maxwell, Kelly M.; Clemens, J. Quentin; Mazzenga, Laura; Kielb, Stephanie

J. [Reprint Author]

CS Northwestern Univ, Feinberg Sch Med, Dept Urol, 303 E Chicago Ave, Tarry

16-703, Chicago, IL 60611 USA

skielb@nmff.org

SO Journal of Urology, (FEB 2008) Vol. 179, No. 2, pp. 549-551. CODEN: JOURAA. ISSN: 0022-5347.

DT Article

LA English

ED Entered STN: 20 Feb 2008

Last Updated on STN: 20 Feb 2008

AB Purpose: Recent publications support sacral nerve stimulator implantation

in patients with interstitial cystitis. To our

knowledge the reprogramming requirements for all patients following

stimulator implantation has not been described and it is unknown whether

the number of sessions required vary by pre-implantation diagnosis

. We determined overall reprogramming requirements following nerve

stimulator implantation and whether requirements vary based on preoperative indication. Materials and Methods: After obtaining institutional review board approval we retrospectively reviewed the records of all patients who underwent sacral nerve stimulator

implantation at our institution between June 2002 and October 2004. The

preoperative indication and number of reprogramming sessions during the

initial test period (stage 1) and following permanent implantation (stage

2) were compared. Results: The 17 patients proceeding to stage 2 with a $\,$

minimum 12-month followup during the study period were included. Mean age

was 43 years (range 26 to 78) and all patients except 1 were female.

Patients were separated by diagnosis for evaluation purposes, including urgency/frequency/incontinence in 8, urinary retention in 2 and

interstitial cystitis in 7. The average number of reprogramming sessions during stage 1 was 0.9, 3.5 and 2.3 for urgency/frequency/incontinence, urinary retention and interstitial

cystitis, respectively. The average number of reprogramming sessions after stage 2 was 2.8, 3.0 and 6.9 at 12-month followup for

urgency/frequency/incontinence, urinary retention and interstitial

cystitis, respectively. No patient had the stimulator removed for

reprogramming failure.Conclusions: Patients in urinary retention appear to

require more frequent reprogramming during stage 1, while patients with

interstitial cystitis require more sessions after stage 2 implantation.

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AN 2008:85285 BIOSIS

DN PREV200800078702

TI Pharmacologic management of painful bladder syndrome/interstitial cystitis: A systematic review (vol 167, pg 1922, 2007).

AU Dimitrakov, J.; Kroenke, K.; Steers, W. D.; Berde, C.; Zurakowski, D.;

Freeman, M. R.; Jackson, J. L.

SO Archives of Internal Medicine, (DEC 10 2007) Vol. 167, No. 22, pp. 2452.

CODEN: AIMDAP. ISSN: 0003-9926.

DT Article

Errata

LA English

ED Entered STN: 23 Jan 2008 Last Updated on STN: 23 Jan 2008 L8 ANSWER 10 OF 316 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on

STN

AN 2008:35914 BIOSIS

DN PREV200800035088

TI Pharmacologic management of painful bladder syndrome/interstitial cystitis - A systematic review.

AU Dimitrakov, Jordan [Reprint Author]; Kroenke, Kurt; Steers, William D.;

Berde, Charles; Zurakowski, David; Freeman, Michael R.; Jackson, Jeffrey

L.

CS Harvard Univ, Sch Med, Childrens Hosp Boston, Harvard Urol Dis Res Ctr,

Enders Res Bldg, Room 1061, 300 Longwood Ave, Boston, MA 02115 USA Jordan.Dimitrakov@childrens.harvard.edu

SO Archives of Internal Medicine, (OCT 8 2007) Vol. 167, No. 18, pp. 1922-1929.

CODEN: AIMDAP. ISSN: 0003-9926.

DT Article

General Review; (Literature Review)

LA English

ED Entered STN: 27 Dec 2007

Last Updated on STN: 27 Dec 2007

AB Background: More than 180 different types of therapy have been used in the

treatment and management of painful bladder syndrome/interstitial cystitis (PBS/IC), yet evidence from clinical trials remains inconclusive. This study aimed to evaluate the efficacy of pharmacologic

approaches to PBS/IC, to quantify the effect size from randomized controlled trials, and to begin to inform a clinical consensus of treatment efficacy for PBS/IC.Methods: We identified randomized controlled

trials for the pharmacologic treatment of patients wth PBS/IC diagnosed on the basis of National Institute of Diabetes and Digestive and Kidney Diseases or operational criteria. Study limitations

include considerable patient heterogeneity as well as variability in the

definition of symptoms and in outcome assessment. Results: We included a

total of 1470 adult patients from 21 randomized controlled trials. Only

trials for pentosan polysulfate sodium had sufficient numbers to allow a

pooled analysis of effect. According to a random-effects model, the

pooled estimate of the effect of pentosan polysulfate therapy suggested

benefit, with a relative risk of 1.78 for patient-reported improvement in

symptoms (95% confidence interval, 1.34-2.35). This result was not

heterogeneous (P=.47) and was without evidence of publication bias (P

= .18). Current evidence also suggests the efficacy of dimethyl sulfoxide

and amitryp- tiline therapy. Hydroxyzine, intravesical bacille Calmette-Guerin, and resiniferatoxin therapy failed to demonstrate

efficacy, but evidence was inconclusive owing to methodological limitations. Conclusions: Pentosan polysulfate may be modestly beneficial

for symptoms of PBS/IC. There is insufficient evidence for other pharmacologic treatments. A consensus on standardized outcome measures is

urgently needed.

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L1 31928 S CALCITONIN GENE RELATED PEPTIDE OR CGRP

L2 9041 S PITUITARY ADENYLATE CYCLASE ACTIVATING PEPTIDE OR

PACAP

L3 40576 S L1 OR L2

L4 43 S L3 AND INTERSTITIAL CYSTITIS

L5 27 DUP REM L4 (16 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 17:23:30 ON 25 JAN 2010

FILE 'BIOSIS, CAPLUS, EMBASE' ENTERED AT 17:35:03 ON 25 JAN 2010

L6 4413 S INTERSTITIAL CYSTITIS

L7 1735 S L6 AND DIAGNOS?

L8 316 S L7 AND REVIEW

FILE 'STNGUIDE' ENTERED AT 17:39:36 ON 25 JAN 2010

FILE 'BIOSIS, CAPLUS, EMBASE' ENTERED AT 17:41:39 ON 25 JAN 2010

=> s 13 and pelvic pain

L9 19 L3 AND PELVIC PAIN

=> dup rem 19

PROCESSING COMPLETED FOR L9

L10 12 DUP REM L9 (7 DUPLICATES REMOVED)

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AN 2009546163 EMBASE

TI Visceral hyperalgesia in chronic pelvic pain.

AU Aslam, N.; Harrison, G.; Khan, K.

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Hospital, Birmingham, United Kingdom.

AU Patwardhan, S. (correspondence)

CS Walsgrave University Hospital, Clifford Bridge Road, Coventry CV2 2DX,

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SO BJOG: An International Journal of Obstetrics and Gynaecology, (November

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2009) Vol. 116, No. 12, pp. 1551-1555.
     Refs: 25
     ISSN: 1470-0328; E-ISSN: 1471-0528 CODEN: BIOGFQ
     Blackwell Publishing Ltd, 9600 Garsington Road, Oxford, OX4 2XG,
PΒ
United
    Kingdom.
CY
     United Kingdom
DT
     Journal; Note
FS
     005
             General Pathology and Pathological Anatomy
     800
             Neurology and Neurosurgery
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             Obstetrics and Gynecology
     028
             Urology and Nephrology
     037
             Drug Literature Index
LA
    English
ED
     Entered STN: 18 Nov 2009
     Last Updated on STN: 18 Nov 2009
L10
    ANSWER 2 OF 12 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All
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ΑN
     2009489895 EMBASE
ΤI
     Endometriosis-associated nerve fibers and pain.
    Medina, Melissa G.
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     Acta Obstetricia et Gynecologica Scandinavica, (2009) Vol. 88,
SO
No. 9, pp.
     968-975.
     Refs: 29
     ISSN: 0001-6349; E-ISSN: 1600-0412 CODEN: AOGSAE
     Informa Healthcare, Telephone House, 69 - 77 Paul Street, EC2A
PΒ
4LQ, United
    Kingdom.
PUI
     913657353
CY
    United Kingdom
     Journal; General Review; (Review)
DT
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FS 005 General Pathology and Pathological Anatomy
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010 Obstetrics and Gynecology

037 Drug Literature Index

LA English

SL English

ED Entered STN: 11 Nov 2009

Last Updated on STN: 11 Nov 2009

AB The assessment and diagnosis of endometriosis remain elusive targets.

Patient and medical-related factors add to delays in the detection and

treatment. Recently, investigators have revealed specific nerve fibers

present in endometriotic tissue, with existing parallels between density

and pain severity. The aim of this review is to compile a comprehensive $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right)$

review of existing literature on endometriosis-related nerve fiber

detection, and the effects of medical therapy on these neural fibers. We

performed a systematic literature-based review using Medline and PubMed of

nerve fibers detected in eutopic endometrium, endometriotic lesions, and

the peritoneum. Various arrangements of significant medical terms and

phrases consisting of endometriosis, pelvic pain,

nerve fiber detection/density in endometriosis, and diagnoses methodology,

including treatment and detection were applied in the search. Subsequent $\ensuremath{\mathsf{Subsequent}}$

references used were cross-matched with existing sources to compile all $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

additional similar reports. Similar nerve fibers were detected within

lesions, endometrium, and myometrium, though at varying degrees of

shown to be related to a reduction in fiber density. A direct result of $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

specific nerve fiber detection within eutopic endometrial layers points to

the use of a minimally invasive endometrial biopsy technique in reducing

delay in diagnosis and subsequent possible preservation of fertility.

L10 ANSWER 3 OF 12 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 1

ΑN 2009:263278 BIOSIS PREV200900263278 DN Rich innervation of deep infiltrating endometriosis. ΤI Wang, Guoyun; Tokushige, Natsuko [Reprint Author]; Markham, ΑU Robert: Fraser, Ian S. CS Univ Sydney, Queen Elizabeth II Res Inst Mothers and Infants, and Gynecol, Sydney, NSW 2006, Australia ntokushige@med.usyd.edu.au Human Reproduction (Oxford), (APR 2009) Vol. 24, No. 4, pp. SO 827-834. CODEN: HUREEE. ISSN: 0268-1161. DT Article LA English ED Entered STN: 16 Apr 2009 Last Updated on STN: 16 Apr 2009 Deep infiltrating endometriosis (DIE) is a specific type of AΒ endometriosis, which can be associated with more severe pelvic pain than other forms of endometriotic lesions. However, the mechanisms by which pain is generated are not well understood.DIE (n = 31) and peritoneal endometriotic (n = 40) lesions were sectioned and stained immunohistochemically with antibodies against protein gene product 9.5, neurofilament, nerve growth factor (NGF), NGF receptors tyrosine kinase receptor-A (Trk-A) and p75, substance P, calcitonin gene -related peptide, vesicular acetylcholine transporter, neuropeptide Y, vasoactive intestinal peptide and tyrosine hydroxylase to demonstrate myelinated, unmyelinated, sensory and autonomic nerve fibres. There were significantly more nerve fibres in DIE (67.6 +/-65.1/mm(2)) than in peritoneal endometriotic lesions (16.3 +/-10.0/mm(2)(P < 0.01). DIE was innervated abundantly by sensory A delta, sensory C, cholinergic and adrenergic nerve fibres; NGF, Trk-A and p75 were strongly expressed in endometriotic glands and stroma of DIE. The rich of DIE may help to explain why patients with this type of lesion have severe pelvic pain. L10 ANSWER 4 OF 12 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights

reserved on STN 2008361822 EMBASE

AN

ΤI Evidence for the use of botulinum toxin in the chronic pain setting - A review of the literature. ΑU Jeynes, Louise C. The Boyle Department of Anesthesia, St. Bartholomew's Hospital, CS London, United Kingdom. ΑU Gauci, Charles A., Dr. (correspondence) Whipps Cross University Hospital, London, United Kingdom. CS charles.gauci@bt internet.com Gauci, Charles A., Dr. (correspondence) ΑU CS Queen's Hospital, Essex, United Kingdom. charles.gauci@btinternet.com Pain Practice, (July/August 2008) Vol. 8, No. 4, pp. 269-276. SO Refs: 100 ISSN: 1530-7085; E-ISSN: 1533-2500 CODEN: PPARCJ Blackwell Publishing Inc., 350 Main Street, Malden, MA 02148, PΒ United States. CY United States DT Journal; (Short Survey) FS 800 Neurology and Neurosurgery 019 Rehabilitation and Physical Medicine 030 Clinical and Experimental Pharmacology 037 Drug Literature Index 038 Adverse Reactions Titles English LA SL English Entered STN: 7 Aug 2008 ED Last Updated on STN: 7 Aug 2008 A significant proportion of chronic pain is of musculoskeletal AB origin. Botulinum toxin (BTX) has been successfully used in the treatment of spasmodic torticollis, limb dystonia, and spasticity. Investigators have, thus, become interested in its potential use in treating many chronic pain conditions. Practitioners have used BTX, outside the product license, in the treatment of refractory myofascial pain syndrome and neck and low back pain (LBP). This article reviews the current evidence relating to chronic pain practice. There is evidence supporting the use of both BTX type A and type B in the treatment of cervical dystonias. The weight of evidence is in favor of BTX type A as a treatment in: pelvic pain

, plantar fasciitis, temporomandibular joint dysfunction

associated facial

pain, chronic LBP, carpal tunnel syndrome, joint pain, and in complex

regional pain syndrome and selected neuropathic pain syndromes. The $\,$

weight of evidence is also in favor of BTX type A and type B in piriformis

 $\,$ syndrome. There is conflicting evidence relating to the use of BTX in the

treatment whiplash, myofascial pain, and myogenous jaw pain. It does

appear that BTX is useful in selected patients, and its duration of action

may exceed that of conventional treatments. This seems a promising

treatment that must be further evaluated. . COPYRGT. 2008 World Institute $\,$

of Pain.

L10 ANSWER 5 OF 12 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights

reserved on STN

AN 2007507114 EMBASE

TI Neuroendocrine-immune disequilibrium and endometriosis: An interdisciplinary approach.

AU Tariverdian, Nadja; Blois, Sandra M.; Arck, Petra C. (correspondence)

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SO Seminars in Immunopathology, (Jun 2007) Vol. 29, No. 2, pp. 193-210.

Refs: 196

ISSN: 1863-2297; E-ISSN: 1863-2300

CY Germany

DT Journal; General Review; (Review)

FS 010 Obstetrics and Gynecology

026 Immunology, Serology and Transplantation

OO5 General Pathology and Pathological Anatomy

LA English

SL English

ED Entered STN: 2 Nov 2007

Last Updated on STN: 2 Nov 2007

AB Endometriosis, a chronic disease characterized by endometrial tissue

located outside the uterine cavity, affects one fourth of young women and

is associated with chronic pelvic pain and

infertility. However, an in-depth understanding of the pathophysiology

and effective treatment strategies of endometriosis is still largely

elusive. Inadequate immune and neuroendocrine responses are significantly

involved in the pathophysiology of endometriosis, and key findings are

summarized in the present review. We discuss here the role of different

immune mechanisms particularly adhesion molecules, protein-glycan interactions, and pro-angiogenic mediators in the development and progression of the disease. Finally, we introduce the concept of endometrial dissemination as result of a neuroendocrine-immune disequilibrium in response to high levels of perceived stress caused by

cardinal clinical symptoms of endometriosis. .COPYRGT. 2007 Springer-Verlag.

L10 ANSWER 6 OF 12 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

DUPLICATE 2

AN 2007:39911 BIOSIS

DN PREV200700041566

TI Nerve fibres in peritoneal endometriosis.

AU Tokushige, Natsuko [Reprint Author]; Markham, Robert; Russell, Peter;

Fraser, Ian S.

CS Univ Sydney, Dept Obstet and Gynaecol, Queen Elizabeth Res Inst Mothers

and Infants 2, Sydney, NSW 2006, Australia ntokushige@med.usyd.edu.au

SO Human Reproduction (Oxford), (NOV 2006) Vol. 21, No. 11, pp. 3001-3007.

CODEN: HUREEE. ISSN: 0268-1161.

DT Article

LA English

ED Entered STN: 3 Jan 2007 Last Updated on STN: 3 Jan 2007

AB BACKGROUND: Endometriosis is a gynaecological disease that can be associated with severe pelvic pain; however, the

mechanisms by which pain is generated remain unknown. METHODS: Peritoneal

endometriotic lesions and normal peritoneum were prepared from women with

and without endometriosis (n = 40 and 36, respectively). Specimens were

also prepared from endosalpingiosis lesions (n = 9). These sections were

stained immunohistochemically with antibodies against protein gene product

9.5, neurofilament (NF), nerve growth factor (NGF), NGF receptor p75

(NGFRp75), substance P (SP), calcitonin generelated peptide (CGRP), acetylcholine (ACh)

and tyrosine hydroxylase (TH) to demonstrate myelinated, unmyelinated,

significantly more nerve fibres identified in peritoneal endometriotic

lesions than in normal peritoneum (P < 0.001) or endosalpingiosis lesions

(P < 0.001). These nerve fibres were SP, CGRP, ACh or TH immunoreactive. Many of these markers were co-localized. There was an $\,$

intense NGF immunoreactivity near endometriotic glands, and ${\tt NGFRp75}$

immunoreactive nerve fibres were present near endometriotic glands and

blood vessels in the peritoneal endometriotic lesions. CONCLUSIONS:

Peritoneal endometriotic lesions were innervated by sensory ${\tt A}$ delta,

sensory C , cholinergic and adrenergic nerve fibres. These nerve fibres

 $\,$ may play an important role in the mechanisms of pain generation in this

condition.

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ANSWER 7 OF 12 CAPLUS COPYRIGHT 2010 ACS on STN
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AN
     142:461621
DN
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ΤI
     disorders and uses for diagnosis and treatment
     Wood, Ronald W.; Reeder, Jay; Schwarz, Edward M.; Messing,
ΙN
Edward M.;
     Schoen, Susan R.; Vizzard, Margaret A.; Dickerson, Ian
PA
     University of Rochester, USA
     PCT Int. Appl., 43 pp.
SO
     CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                        KIND
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DATE
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             SN, TD, TG
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PRAI US 2003-515408P
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     WO 2004-US36015
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The present invention relates generally to the diagnosis and
treatment of
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pelvic pain disorders, including bladder disorders that

are characterized by increased expression of the neuropeptides

CGRP and/or PACAP. One aspect of the present invention is directed to a method of diagnosing pelvic pain disorders. This method involves measuring a level of one or both of the

neuropeptides calcitonin gene-related peptide (CGRP) or pituitary adenylate cyclase activating peptide (PACAP)

in a patient sample and then determining whether the CGRP or PACAP level in the patient sample is elevated in relation to a level of CGRP or PACAP in a normal asymptomatic

population. A second aspect of the present invention is directed to a

 $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) +\left(1\right) \left(1\right) +\left(1\right) +\left(1\right) \left(1\right) +\left(1\right) +\left($

or development of pelvic pain syndromes. A third aspect of the present invention is directed to a method of treating a

pelvic pain disorder in a patient. This method involves providing a CGRP or PACAP antagonist and administering the CGRP or PACAP antagonist to the patient in an amount effective to treat the pelvic pain disorder. A fourth aspect of the present invention is directed to a method of characterizing

response to treatment for a pelvic pain disorder. A fifth aspect of the present invention relates to a transgenic nonhuman

mammal that includes a first DNA construct that is expressed in bladder

sensory neurons, the first DNA construct having a promoter operatively

coupled to a DNA mol. encoding a neuropeptide (either PACAP or CGRP). The transgenic nonhuman mammals are characterized by overexpression (i.e., relative to nontransgenic mammals) of the neuropeptide. These transgenic animals are useful for the study of

pelvic pain disorders and assessing the efficacy of
 potential therapeutic agents in the treatment thereof.
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L10 ANSWER 8 OF 12 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

DUPLICATE 3

AN 2006:27247 BIOSIS

DN PREV200600024144

TI Possible mechanism of referred pain in the perineum and pelvis associated

with the prostate in rats.

AU Chen, Yong; Song, Bo [Reprint Author]; Jin, Xi-Yu; Xiong, En-Qing; Zhang,

Jian-Hua

CS Third Mil Med Univ, SW Hosp, Dept Urol, Chongqing 40008, Peoples R China

SO Journal of Urology, (DEC 2005) Vol. 174, No. 6, pp. 2405-2408. CODEN: JOURAA. ISSN: 0022-5347.

DT Article

LA English

ED Entered STN: 21 Dec 2005

Last Updated on STN: 21 Dec 2005

AB Purpose: Since persistent pain in the perineum and pelvic floor associated

with chronic prostatitis/chronic pelvic pain syndrome

has been hypothesized to be referred pain, it might also be explained by

neural mechanisms. Materials and Methods: Dual retrograde fluorescent $\,$

labeling and immunohistochemistry were identified as methods with which to

investigate the neurogenic aspect of this status. The dual distribution

of dorsal root ganglia (DRG) cells was determined after double retrograde

fluorescent staining of the prostate and pelvic floor, and the prostate

and perineum somatic nerves. Calcitonin generelated peptide (CGRP) and substance P (SP) in

dual labeled cells were determined by immunohistochemistry, giving

possible insight into the cause of pelvic pain

.Results: Fluorescent double labeled cells were found in the lumbar and

sacral DRG, while double labeled cells were distributed predominantly in

L6 to S1 and L1 to L2 segment DRG in groups 1 and 2, respectively. On

immunohistochemistry some of them were confirmed to contain CGRP and SP. Thus, there are crossover pathways between the prostate and

pelvic floor.Conclusions: The findings that we present confirm that the

peripheral process of DRG cells dichotomizes to the prostate, sphincter

and somatic parties simultaneously. Some of these cells contain CGRP and SP, which indicate that referred pain in the perineum and

pelvic floor may be caused by an axon reflex in the peripheral process of

DRG neurons.

L10 ANSWER 9 OF 12 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN $\,$

DUPLICATE 4

AN 2004:398362 BIOSIS

DN PREV200400399374

TI Innervation of ectopic endometrium in a rat model of endometriosis.

AU Berkley, Karen J. [Reprint Author]; Dmitrieva, Natalia; Curtis, Kathleen

S.; Papka, Raymond E.

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SO Proceedings of the National Academy of Sciences of the United States of

America, (July 27 2004) Vol. 101, No. 30, pp. 11094-11098. print.

ISSN: 0027-8424 (ISSN print).

DT Article

LA English

ED Entered STN: 13 Oct 2004

Last Updated on STN: 13 Oct 2004

AB Endometriosis (ENDO) is a disorder in which vascularized growths of

endometrial tissue occur outside the uterus. Its symptoms include reduced

fertility and severe pelvic pain. Mechanisms that maintain the ectopic growths and evoke symptoms are poorly understood.

One factor not yet considered is that the ectopic growths develop their

own innervation. Here, we tested the hypothesis that the growths develop

both an autonomic and a sensory innervation. We used a rat model of

surgically induced ENDO whose growths mimic those in women. Furthermore, $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

similar to women with ENDO, such rats exhibit reduced fertility and $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1$

increased pelvic nociception. The ENDO was induced by autotransplanting,

on mesenteric cascade arteries, small pieces of uterus that formed

vascularized cysts. The cysts and healthy uterus were harvested from $% \left(1\right) =\left(1\right) +\left(1\right$

proestrous rats and immunostained using the pan-neuronal marker PGP9.5 and

specific markers for calcitonin gene-related

peptide (CGRP) (sensory C and AS fibers), substance P

(SIP) (sensory C and AS fibers) and vesicular monoamine transporter $% \left(\mathcal{S}_{i}^{A}\right) =0$

(sympathetic fibers). Cysts (like the uterus) were robustly innervated,

with many PGP9.5-stained neurites accompanying blood vessels and extending

into nearby luminal epithelial layers. CGRP-, SP-, and vesicular monoamine transporter-immunostained neurites also were

vesicular monoamine transporter-immunostained neurites also were observed,

with CGRP and SP neurites extending the furthest into the cyst lining. These results demonstrate that ectopic endometrial growths

develop an autonomic and sensory innervation. This innervation could

contribute not only to symptoms associated with ENDO but also to maintenance of the ectopic growths.

L10 ANSWER 10 OF 12 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights

reserved on STN

AN 2004355964 EMBASE

TI Mechanisms in prostatitis/chronic pelvic pain syndrome.

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SO Journal of Urology, (Sep 2004) Vol. 172, No. 3, pp. 839-845. Refs: 75

ISSN: 0022-5347 CODEN: JOURAA

CY United States

DT Journal; General Review; (Review)

FS 026 Immunology, Serology and Transplantation

028 Urology and Nephrology

003 Endocrinology

008 Neurology and Neurosurgery

LA English

SL English

ED Entered STN: 16 Sep 2004

Last Updated on STN: 16 Sep 2004

AB Purpose: We reviewed the current literature on mechanisms involved in the

pathogenesis of prostatitis/chronic pelvic pain

syndrome (CPPS). Materials and Methods: A literature review for the years

 $1966\ \text{to}\ 2003\ \text{was}$ performed using the MEDLINE database of the United States

National Library of Medicine. Results: National Institutes of Health

categories I and II prostatitis result from identifiable prostatic

infections, whereas patients with category IV are asymptomatic. The $\,$

majority of symptomatic cases are category III or chronic prostatitis

(CP)/CPPS. The etiology of CP/CPPS is unknown. The traditional marker of $\ensuremath{\mathsf{CP}}$

inflammation, namely white blood cells in prostatic fluids, does not

correlate with the predominant symptom of pelvic pain.

An imbalance toward increased proinflammatory and decreased anti-inflammatory cytokines has been implicated and a few studies have

shown some correlation of this with pelvic pain. The imbalance in some men may result from polymorphisms at the cytokine loci.

An autoimmune process may be involved and experimental evidence indicates

that this can be under hormonal influence. Recent findings include

the source of the symptoms. Pelvic pain also

correlates with the neurotrophin nerve growth factor implicated in

neurogenic inflammation and central sensitization. Finally, psychological

stress may produce measurable biochemical changes and influence the other

processes. The role of normal prostatic bacterial flora in inciting the

inflammatory response has also been reconsidered. Conclusions: The

symptoms of CP/CPPS appear to result from an interplay between psychological factors and dysfunction in the immune, neurological and

endocrine systems.

L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2002:256747 CAPLUS

DN 136:257266

TI Methods of diagnosing and treating small intestinal bacterial overgrowth

and related conditions

IN Lin, Henry C.; Pimentel, Mark

PA USA

SO U.S. Pat. Appl. Publ., 53 pp., Cont.-in-part of U.S. Ser. No. 374,142.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 6

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	US	2006-457445	A1	20060713				
	US	2007-838672	A1	20070814				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT AB Disclosed is a method of treating small intestinal bacterial overgrowth

(SIBO) or a SIBO-caused condition in a human subject. SIBO-caused

conditions include irritable bowel syndrome, fibromyalgia, chronic

pelvic pain syndrome, chronic fatigue syndrome,

depression, impaired mentation, impaired memory, halitosis, tinnitus,

sugar craving, autism, attention deficit/hyperactivity disorder,
drug

sensitivity, an autoimmune disease, and Crohn's disease. Examples are

provided showing effects of antibiotics on SIBO, demonstrating the roles

of peptide YY and the serotoninergic/adrenergic/opioid pathways in SIBO, $\!\!\!$

and the effects of ondansetron, propranolol, norepinephrine and naloxone

on intestinal transit. The invention thus relates to slowing upper $% \left(1\right) =\left(1\right) +\left(1\right)$

gastrointestinal transit, thereby enhancing the digestion and/or absorption of predigested nutrients. Gastrointestinal transit-slowing

compns. comprise active agents such as lipids, serotonin, serotonin

agonists, serotonin re-uptake inhibitors, peptide YY, calcitonin gene-related peptide, adrenergic agonists and

opioid agonists. Also disclosed are a method of screening for the

abnormally likely presence of SIBO in a human subject and a method of $\ensuremath{\mathsf{S}}$

detecting SIBO in a human subject. A method of determining the relative

severity of SIBO or a SIBO-caused condition in a human subject, in whom

small intestinal bacterial overgrowth has been detected, is also disclosed.

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ΑN

TI Growth of nerve fibres into murine peritoneal adhesions.

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AB Adhesions in the peritoneal cavity have been implicated in the cause of

intestinal obstruction and infertility, but their role in the aetiology of

chronic pelvic pain is unclear. Nerves have been demonstrated in human pelvic adhesions, but the presence of pain-conducting fibres has not been established. The purpose of this

study was to use an animal model to examine the growth of nerves during

adhesion formation at various times following injury and to characterize

the types of fibres present. Adhesions were generated in mice by injuring

the surface of the caecum and adjacent abdominal wall, with apposition.

At 1-8 weeks post-surgery, adhesions were processed and nerve fibres

characterized histologically, immunohistochemically, and ultrastructurally. Peritoneal adhesions had consistently formed by 1 week

after surgery and from 2 weeks onwards, all adhesions contained some nerve

fibres which were synaptophysin, calcitonin generelated peptide, and substance P-immunoreactive, and were seen to originate from the caecum. By 4 weeks post-surgery, nerve

fibres were found to originate from both the caecum and the abdominal

wall, and as demonstrated by acetylcholinesterase
histochemistry, many

traversed the entire adhesion. Ultrastructural analysis showed both

 $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

study provides the first direct evidence for the growth of sensory nerve

fibres within abdominal visceral adhesions in a murine model and $\operatorname{suggests}$

that there may be nerve fibres involved in the conduction of pain stimuli.

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